



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/934,263	08/21/2001	Charles Beck	2539/102	6454
2101	7590	05/14/2004	EXAMINER	
BROMBERG & SUNSTEIN LLP 125 SUMMER STREET BOSTON, MA 02110-1618			BISSETT, MELANIE D	
		ART UNIT	PAPER NUMBER	
		1711		

DATE MAILED: 05/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/934,263	BECK ET AL. <i>(CJ)</i>	
	<b>Examiner</b>	<b>Art Unit</b>	1711
	Melanie D. Bissett		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 08 March 2004.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-20, 25, 26 and 31-37 is/are pending in the application.
  - 4a) Of the above claim(s) 1-14, 25 and 26 is/are withdrawn from consideration.
- 5) Claim(s) 32-37 is/are allowed.
- 6) Claim(s) 15-19 is/are rejected.
- 7) Claim(s) 31 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

Art Unit: 1711

1. The rejections based on 35 USC 112 have been withdrawn based on the applicant's arguments. The rejections based on 35 USC 103 have been altered as presented below.

***Claim Rejections - 35 USC § 103***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 15-16, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aizawa et al. in view of Crast et al.
4. From a prior Office action:

Aizawa discloses an in-mold coating process, where a mold surface is sprayed with a polyurethane sealer coating film and a polyurethane primer film, the mold is closed, the films are cured, and a material for forming a polymeric substrate is injection molded into the enclosed space and cured (col. 8 lines 31-52). This polymeric substrate material includes a fibrous filler (col. 8 lines 52-54). Table 3 shows the reaction and molding conditions.

Although the reference does not note the specific use of an unpigmented sealer layer, it is well known in the art that pigments are added to provide color. The minute amount of pigment present in the sealer layer would not have affected the properties (other than coloration) of the coating. Thus, it is the examiner's position that it would have been *prima facie* obvious to use a sealer coating without added pigment as motivated by desired coloration.

Also, the reference notes the spraying of mixed reactant/solvent materials but does not specify the mixing of a polyol/solvent component with a polyisocyanate/solvent component. Crast teaches that such methods are well known in the art for storing the components separately (col. 2 lines 23-33). Because the components of Aizawa's invention appear to be mixed prior to spraying, it is the examiner's position that it would have been *prima facie* obvious to mix the individual reactants with solvent prior to reaction to aid in processing the stored separate components.

5. Regarding the limitation that the surface should have a substantially "predetermined degree of finish", it is the examiner's position that the coatings would inherently take the form of the mold surface, since this is the intent of molding.

6. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aizawa et al. in view of Crast et al. as applied to claims 15-16 and 19 above, and further in view of Matzinger et al.

7. From a prior Office action:

Aizawa and Crast apply as above, failing to mention the use of a barrier layer between the substrate and clear coating. Matzinger discloses a barrier web layer that acts as a protective coating for a substrate (col. 4 lines 19-25). Matzinger also notes that the materials of the invention are compatible with the invention in Aizawa et al. (col. 5 line 33-col. 6 line 18). Thus, it is the examiner's position that it would have been *prima facie* obvious to include a barrier layer in the invention of Aizawa and Crast to provide additional protection for the substrate.

8. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aizawa et al. in view of Crast et al. as applied to claims 15-16 and 19 above, and further in view of Brauer et al.

9. Aizawa and Crast apply as above for the sprayable polyurethane coatings, failing to teach the volume solids contents of the coating components. Brauer teaches coating components having suitable low viscosities for spray coating applications, where it is noted that it is known in the prior art to manipulate solvent and solids contents to obtain a coating of sprayable viscosity (col. 2 lines 9-25; col. 4 lines 1-17). It is the examiner's position that it would have been *prima facie* obvious to use polyol and polyisocyanate

components at any solids content necessary to optimize the spray viscosity of the coatings. This would have been known to one of ordinary skill in the coating art and would have been achievable without undue experimentation.

***Allowable Subject Matter***

10. Claims 32-37 are allowed.
11. Claim 31 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
12. The following is an examiner's statement of reasons for allowance:
13. The closest prior art, Aizawa et al., teaches a method of applying two coatings to a mold, where one coating contains pigments, applying a substrate material, and allowing the coatings to cure. However, the reference does not disclose and teaches away from the claimed coating thicknesses. It is the examiner's position that the applicant's claimed method including the claimed thicknesses would provide a novel and unobvious step over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Response to Arguments***

14. In response to the applicant's arguments that Aizawa does not teach a "predetermined degree of finish" resulting from the "predetermined degree of finish" from the mold, it is noted that the applicant has not specifically defined the term to limit the degree of finish implied. In the broadest interpretation of the term, it is the examiner's position that any molded surface would inherently possess a "predetermined degree of finish" dictated by the mold. The term is a relative term, and so *any* degree of similarity between the surface of the mold and the surface of the molded surface is encompassed by "predetermined degree of finish" or "substantially the predetermined degree of finish". Since Aizawa teaches molding the coatings onto a substrate, it is the examiner's position that the molded surface would inherently take on the finish of the mold to a certain degree, since this is the intent in molding processes.

15. Regarding the applicant's argument that the sealer layer in Aizawa would not function as a clearcoat layer, it is the examiner's position that there is no evidence to support this position. The reference notes that blur may arise in the top coating film but makes no indication that the sealer layer would be subjected to these problems. In fact, the sealer layer is used to prohibit the blurring in the top layer. Since blur prevention is a concern, it would make sense that the reference would employ a method that would prevent blur altogether. Also, the top coating is applied as a spray to the sealer layer after cure, where the solvent from the top layer would be absorbed by the primer layer. The applicant has not provided evidence that the solvent from the sealer layer, applied to the mold with the primer layer, would behave similarly to the top layer. Regardless, it

is also noted that clearcoat has not been defined to exclude blurred films. A blurred or matte film can still exhibit a degree of "clarity" in the broadest interpretation of the claim.

16. For the reasons cited above, it is the examiner's position that the reference teaches molding coatings having a "predetermined degree of finish" as dictated by the mold surface.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie D. Bissett whose telephone number is (571) 272-1068. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mdb



James J. Seidleck  
Supervisory Patent Examiner  
Technology Center 1700